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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/061,719	01/31/2002	Steven Teig	SPLX.P0098	1570
23349	7590	10/04/2004	EXAMINER	
STATTLER JOHANSEN & ADELI			TAT, BINH C	
P O BOX 51860			ART UNIT	
PALO ALTO, CA 94303			PAPER NUMBER	
			2825	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

1. This office action is in response to application 10/061719 filed on 01/31/02.

Claims 1-17 remain pending in the application.

Examiner appreciates the detailed remark offered by Applicant. Base on the remarks and Amendment Examiner has performed additional search, and found a new references.

Claim Objections

Claims 1-17 are object to: The recitation of “output functions”, is not clear to what applicants intend to mean.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Belkhale et al. (U.S. 6023566).
3. As to claims 1 (method) and 14 (computer program) Belkhale et al. teach a method for performing technology mapping, the method comprising: a) receiving a design that is not bounded to a particular technology (see col 2 lines 1-50); b) repeatedly: selecting from the design a candidate sub-network (see col 2 lines 1-50); identifying at least one replacement sub-network from a storage structure that stores replacement sub-networks (see fig 2, fig 3 col 3 lines 32 to col 5 lines 45); replacing the selected candidate sub-network in the design with the replacement sub-network (see col 5 lines 2 to col 7 lines 42); c) wherein at least some of the selected

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candidate sub-network candidate sub network have graph structure that is different from a tree structure or a micro-leaf directed acyclic graph structure (see col 5 lines 2 to col 7 lines 42).

4. As to claims 2 Belkhale et al. teach further comprising: using the parameter to retrieve the replacement sub-network from the storage structure (see col 4 lines 13 to 50).

5. As to claims 3 Belkhale et al. teach wherein the set of output functions includes only one output function.

6. As to claims 4 Belkhale et al. teach wherein the set of output functions includes one or more output functions (see col 5 lines 2 to col 7 lines 42 and background and summary).

7. As to claims 5-6 and 15-17 Belkhale et al. teach terminating the repetitions once a stopping criteria is reached (see col 5 lines 2 to col 7 lines 42 and background and summary); and wherein the received design is not bounded to a particular technology and includes a plurality of circuit elements, the sub-networks are formed by circuit elements, and the storage structure store replacement sub-networks that are bound to the technology, the method further comprising: after terminating the repetitions, traversing the design to identify circuit elements that are not bound to the technology (see col 2 lines 1-50); for each identified circuit element, attempting to identify a replacement sub-network that is stored in the storage structure (see fig 2, fig 3 col 3 lines 32 to col 5 lines 45); if at least one replacement sub-network for an identified circuit element is identified, replacing the circuit element in the design with the identified replacement sub-network (see col 5 lines 2 to col 7 lines 42).

8. As to claims 7-8 Belkhale et al. teach wherein if more than one replacement sub-networks are identified for a circuit element, selecting one of the replacement sub-networks and replacing the circuit element with the selected replacement sub-network (see fig 2, fig 3 col 3 lines 32 to

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col 5 lines 45).

9. As to claim 9 Belkhale et al. teach wherein each circuit element performs a function, wherein if no replacement sub-network is identified for an identified circuit element, decomposing the function of the circuit element into a set of functions, and then attempting to identify a set of replacement sub-networks in the storage structure that perform the set of functions (see col 5 lines 2 to col 7 lines 42 and background and summary).

10. As to claims 10-11 Belkhale et al. teach wherein traversing the design to identify circuit elements comprises identifying circuit elements that existed in the design when the design was received (see col 5 lines 2 to col 7 lines 42 and background and summary); after traversing the design, repeatedly: selecting from the design a candidate sub-network, identifying at least one replacement sub-network from a storage structure that stores replacement sub-networks, replacing the selected candidate sub-network in the design with the replacement sub-network (see col 5 lines 2 to col 7 lines 42 and background and summary).

11. As to claims 12-13 Belkhale et al. teach before replacing the candidate sub-networks with the replacement sub-networks, evaluating whether to replace the selected candidate sub-network with the replacement sub network, wherein certain candidate sub-networks are replaced by replacement sub-networks based on the evaluation, wherein certain candidate sub-networks are not replaced based on the evaluations (see col 5 lines 2 to col 7 lines 42 and background)

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Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh C. Tat whose telephone number is (571) 272-1908. The examiner can normally be reached on 7:30 - 4:00 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew Smith can be reached on (571) 272-1907. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Binh Tat
Art Unit 2825
September 29, 2004

Aluando
THUAN DO
9/30/04